

**WHAT IS CLAIMED IS:**

- 1- A receptacle for storing an article, said receptacle being usable with a similar receptacle for forming a storage unit, said receptacle comprising:
  - 5 a. a base defining a top surface and a bottom surface;
  - b. a substantially elongated rib extending substantially outwardly from said top surface; and
  - c. a substantially elongated groove provided on said bottom surface; wherein
    - 10 i. said groove is configured and sized to releasably engage a rib of said similar receptacle; and
    - ii. said groove is oriented at an acute angle with respect to said rib.
- 2- A receptacle as defined in claim 1, comprising a plurality of substantially elongated grooves provided on said bottom surface, each groove from said plurality of grooves being configured and sized to releasably engage the rib of said similar receptacle.
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- 3- A receptacle as defined in claim 2, said similar receptacle being a first similar receptacle, said receptacle being further usable with a second similar receptacle for forming a storage unit, wherein said plurality of grooves further includes a plurality of substantially elongated grooves
  - a. provided on said bottom surface; and

b. configured and sized to releasably engage simultaneously the rib of said first similar receptacle and a rib of a said second similar receptacle.

4- A receptacle as defined in claim 3, comprising a plurality of substantially elongated ribs extending substantially outwardly from said top surface.

5 5- A receptacle as defined in claim 4, wherein at least one groove from said plurality of grooves is substantially perpendicular to at least one rib from said plurality of ribs.

10 6- A receptacle as defined in claim 4, wherein at least one groove from said plurality of grooves is substantially parallel to at least one rib from said plurality of ribs.

7- A receptacle as defined in claim 4, wherein at least two grooves from said plurality of grooves are mutually substantially collinear.

15 8- A receptacle as defined in claim 4, wherein at least two grooves from said plurality of grooves are mutually substantially parallel and substantially non-collinear.

9- A receptacle as defined in claim 4, wherein at least two grooves from said plurality of grooves are mutually substantially perpendicular.

20 10- A receptacle as defined in claim 4, wherein at least two grooves from said plurality of grooves are oriented at an acute angle with respect to each other.

11- A receptacle as defined in claim 4, wherein said plurality of

grooves defines a plurality of substantially straight channels, each channel including at least two substantially collinear grooves.

12- A receptacle as defined in claim 11, wherein said plurality of channels includes two mutually substantially perpendicular channels.

5 13- A receptacle as defined in claim 11, wherein said plurality of channels includes two substantially parallel and substantially non-collinear channels.

10 14- A receptacle as defined in claim 11, wherein said plurality of channels includes at least two channels oriented at an acute angle with respect to each other.

15- A receptacle as defined in claim 14, wherein said two channels oriented at an acute angle with respect to each other are angled at 45 degrees with respect to each other.

16- A receptacle as defined in claim 11, wherein at least two channels from said plurality of channels intersect.

17- A receptacle as defined in claim 16, wherein said plurality of channels defines an interconnected network of channels.

20 18- A receptacle as defined in claim 17, wherein said network of channels includes a first sub-network of channels substantially arranged in a grid configuration.

19- A receptacle as defined in claim 18, wherein said network of channels includes a second sub-network of channels substantially arranged in a grid configuration, said second sub-network of channels being substantially

angled with respect to said first sub-network of channels.

20- A receptacles as defined in claim 19, wherein said first and second sub-networks of channels each have a center, the centers of said first and second sub-networks of channels being substantially coincident.

5 21- A receptacle as defined in claim 20, wherein said network of channels is defined by a plurality of substantially polygonal projections projecting substantially outwardly from said bottom surface.

10 22- A receptacle as defined in claim 21, wherein said plurality of substantially polygonal projections includes at least one substantially triangular projection.

23- A receptacle as defined in claim 21, wherein said plurality of substantially polygonal projections includes at least one substantially square projection.

15 24- A receptacle as defined in claim 21, wherein said plurality of substantially polygonal projections includes at least one substantially rectangular projection.

25- A receptacle as defined in claim 21, wherein at least one substantially polygonal projection from said plurality of substantially polygonal projections includes a plurality of straight walls connected by a plurality of arcs.

20 26- A receptacle as defined in claim 25, wherein, said plurality of straight walls and said plurality of arcs define a hollow.

27- A receptacle as defined in claim 26, wherein said at least one substantially polygonal projection includes at least one reinforcing member

extending through said hollow.

28- A receptacle as defined in claim 4, wherein said plurality of ribs defines a first side wall, a second side wall and a back wall connected to said first and second side walls.

5 29- A receptacle as defined in claim 28, wherein said base, said first side wall, said second side wall and said back wall define a storage bay for storing the article.

10 30- A receptacle as defined in claim 28, wherein said plurality of ribs further defines first and second front sub-walls respectively connected to said first and second side walls, said first and second sub-walls defining a front opening.

15 31- A receptacle as defined in claim 30, further comprising first and second interior walls, said first and second interior walls including projections from said base at least in part substantially parallel to respectively said first and second walls, wherein said first and second interior walls, said back wall and said base define a storage bay for storing the article.

32- A receptacle as defined in claim 31, wherein said storage bay is configured and sized to accept a Compact Disc (CD) case.

20 33- A receptacle as defined in claim 31, wherein said storage bay is configured and sized to accept a Digital Video Disk (DVD) case.

34- A receptacle as defined in claim 31, wherein:

a. said first and second side walls, said back wall and said first and second front sub-walls each have a projection height outward of

said base, the projection heights of said first and second side walls, said back wall and said first and second front sub-walls being substantially identical and equal to a first projection height; and

5                   b. said first and second interior walls each have a projection height outward of said base, the projection heights of said first and second interior walls being substantially identical and equal to a second projection height.

35-       A receptacle as defined in claim 34, wherein said second  
10      projection height is smaller than said first projection height.

36-       A receptacle as defined in claim 35, wherein said first and second interior walls are connected respectively to said first and second front sub-walls.

37-       A receptacle as defined in claim 36, wherein said first and second interior walls are further connected respectively to said first and second side walls.

38-       A receptacle as defined in claim 37, further comprising a first spring provided inside said storage bay.

39-       A receptacle as defined in claim 38, wherein said first  
20      spring includes a first resilient member connected to said back wall.

40-       A receptacle as defined in claim 39, further comprising a second spring provided inside said storage bay, said second spring including a second resilient member connected to said back wall.

41- A receptacle as defined in claim 40, further including a protuberance projecting substantially outwardly from said base in said opening.

42- A receptacle as defined in claim 41, wherein said protuberance projects at a third height outward of said base, the third height  
5 being smaller than the first and second heights

43- A receptacle as defined in claim 42, wherein said base includes a substantially plane plate.

44- A receptacle as defined in claim 43, wherein said substantially plane plate is substantially square.

10 45- A receptacle as defined in claim 44, wherein:

a. said first and second resilient members each have a substantially uniform cross-section in a plane substantially parallel to said substantially plane plate; and

15 b. said substantially plane plate includes first and second narrow openings respectively substantially shaped as the cross-sections of said first and second resilient members and located therebelow.

46- A receptacle as defined in claim 1, wherein said receptacle is integrally molded.

20 47- A receptacle as defined in claim 1, wherein said receptacle includes a polymer.

48- A receptacle as defined in claim 47, wherein said

receptacle consists in a one-piece molded polymer object.

49- A receptacle for storing an article as defined in claim 1, wherein said groove is configured and sized to releasably interlock with the rib of said similar receptacle.

5 50- A receptacle for storing an article as defined in claim 49, wherein said groove is configured and sized to releasably interlock with the rib of said similar receptacle through friction.

51- A storage unit comprising a first and a second receptacle, wherein:

10 a. said first receptacle includes:

- i. a first base defining a first top surface and a first bottom surface; and
- ii. a substantially elongated rib extending substantially outwardly from said first top surface;

15 b. said second receptacle includes:

- i. a second base defining a second top surface and a second bottom surface, said second base being substantially identical to said first base; and
- ii. a substantially elongated groove provided on said bottom surface; and

20 c. said groove releasably engages said rib to connect said second receptacle to said first receptacle, said rib and said groove being

oriented such that when said first and second receptacles are connected, said first base is oriented at an acute angle with respect to said second base.

52- A storage unit as defined in 51, comprising a plurality of

5 substantially identical receptacles, said first and second receptacles being part of said plurality of receptacles, each receptacle from said plurality of receptacles including:

10 a. a base defining a first top surface and a first bottom surface and having a center;

10 b. a plurality of substantially elongated ribs extending substantially outwardly from said first top surface;

10 c. a plurality of substantially elongated grooves provided on said bottom surface;

10 d. a storage bay configured and sized to receive an article; wherein

15 e. each groove from said plurality of grooves is configured and sized to either:

20 i. releasably interlock at least one rib of another said receptacle from said plurality of receptacles; or

20 ii. releasably interlock simultaneously at least one said rib of a first other said receptacle from said plurality of receptacles and at least one said rib of a second other said receptacle from said plurality of receptacles.

53- A storage unit as defined in claim 52, wherein two receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are substantially similarly oriented and aligned.

54- A storage unit as defined in claim 52, wherein two  
5 receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are substantially similarly oriented and offset.

10 55- A storage unit as defined in claim 52, wherein two receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are oriented substantially perpendicularly to each other and substantially aligned.

56- A storage unit as defined in claim 52, wherein two receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are oriented substantially perpendicularly to each other and offset.

15 57- A storage unit as defined in claim 52, wherein two receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are oriented with an acute angle between each other with substantially aligned base centers.

20 58- A storage unit as defined in claim 52, wherein two receptacles from said plurality of receptacles are interlocked such that said bases of said two receptacles are oriented with an acute angle between each other with offset base centers.

25 59- A storage unit as defined in claim 52, wherein three receptacles from said plurality of receptacles are interlocked such that a first specific receptacle from said plurality of receptacles interlocks through a given

said groove simultaneously with a second and a third said receptacle.

60- A storage unit as defined in claim 52, further comprising a pivot module including an upper part and a lower part;

- a. said upper part being rotatably connected to said lower portion;
- 5 b. said lower part being provided with a substantially elongated groove configured and sized to either:
  - i. releasably interlock at least one rib of one said receptacle from said plurality of receptacles; or
  - 10 ii. releasably interlock simultaneously at least one said rib of a first said receptacle from said plurality of receptacles and at least one said rib of a second said receptacle from said plurality of receptacles.

61- A storage unit as defined in claim 60, wherein said upper part is provided with a substantially elongated rib configured and sized to releasably interlock with at least one said groove of one said receptacle from said plurality of receptacles.

62- A storage unit as defined in claim 52, further comprising a top module including:

- 20 a. a substantially flat portion provided with a groove adapted to interlock at least one rib of one said receptacle from said plurality of receptacles; and
- b. a substantially hemispheric portion provided with a plurality of

indentations configured and sized to receive the article.

63- A storage unit as defined in claim 62, wherein the article is a Compact Disc (CD) case.

64- A storage unit as defined in claim 62, wherein the article is 5 a Digital Video Disc (DVD) case.

65- A receptacle for storing an article, said receptacle being usable with a similar receptacle for forming a storage unit, said receptacle comprising:

- a. a base defining a top surface and a bottom surface;
- 10 b. a substantially elongated male means provided on said top surface; and
- c. a substantially elongated female means provided on said bottom surface, said male means being oriented at an acute angle with respect to said female means; wherein
- 15 d. said male means and said female means are configured and sized such that said receptacle and said similar receptacle are interlocked upon the insertion of said male means of said receptacle into a female means of said similar receptacle.

66- A receptacle as defined in claim 65, comprising a plurality 20 of substantially elongated female means provided on said bottom surface, each female means from said plurality of female means being configured and sized to releasably interlock the male means of said similar receptacle.

67- A receptacle as defined in claim 66, said similar receptacle being a first similar receptacle, said receptacle being further usable with a second similar receptacle for forming a storage unit, wherein said plurality of female means further includes a plurality of substantially elongated female  
5 means

- a. provided on said bottom surface; and
- b. configured and sized to releasably interlock simultaneously the male means of said first similar receptacle and a male means of said second similar receptacle.

10 68- A receptacle as defined in claim 67, comprising a plurality of substantially elongated male means:

- a. provided on said top surface; and
- b. configured and sized to releasably interlock a female means of said first similar receptacle.

15 69- A receptacle for storing an article, said receptacle being usable with a similar receptacle for forming a storage unit, said receptacle comprising:

- a. a base defining a top surface and a bottom surface;
- b. a storage bay defined at least in part by said base and configured and sized for receiving the article;
- c. a substantially elongated rib extending substantially outwardly from said top surface; and

d. a substantially elongated groove provided on said bottom surface; wherein

i. said groove is configured and sized to releasably engage the rib of said similar receptacle; and

5 ii. said groove is oriented at an acute angle with respect to said rib.

70- A receptacle for storing an article, said receptacle being usable with a similar receptacle for forming a storage unit, said receptacle comprising:

10 a. a storage bay configured and sized to store the article;

b. a bottom portion located below said storage bay; and

c. a top portion located above said storage bay; wherein

15 d. said bottom and top portions are configured and sized such that said bottom portion of said receptacle can releasably engage the top portion of said similar receptacle in at least five discrete coplanar orientations .